Summary of Silurian Bedrock Standards¹

(effective 9/27/18)

Depth to Bedrock	Solid Manure Conditions (12% or greater solid material by volume)	Liquid Manure Conditions
<2' Verification Required ²	No mechanical application	No mechanical application
2' – 3' Verification Required ²	Incorporate³ within 72 hours to ≤4" depth and: At least one of the following: a) Rate ≤ 15 T/acre, b) Within 10 d planting or established crop, c) Pathogens ≤ 500,000 CFU	Pre-tillage and; Inject or incorporate ⁴ ≤4" depth within 24hr and; At least one of the following: a) Rate is lesser of UW A2809 or Table 1 b) Within 10 d planting or established crop, c) Pathogens ≤ 500,000 CFU
3'-5' Verification Required ²	Same as above except ≤6" depth	Pre-tillage and; Inject or incorporate⁴ ≤6" depth within 24 hr and; Same as above
5'-20' No Verification Required	No new conditions proposed	Pre-tillage and; Inject or incorporate ⁵ ≤6" depth within 24 hr and; Same as above
Setbacks	Mechanical Manure applications prohibited within: a) 1,000 ft. of community well b) 250 ft. of private well c) 300 ft. upslope/100 ft. downslope of direct conduit to groundwater. d) 100 ft. of a concentrated flow channel leading to community well, private well, or direct conduit to groundwater.	

¹ This document is a summary of the current draft rule approved by the NRB on 1/24/2018. This rule is not finalized and can still be changed during the rule making process. This summary does not include all the information within the current form of the official draft rule

² Verify bedrock soil depth using infield bedrock verification or Silurian bedrock map information.

³ Not applicable if cropland or pastures meet long-term no-till or have perennial or established crop.

⁴ Not applicable if cropland or pastures meet long-term no-till or have perennial or established crop. Each surface application of liquid manure must not exceed 6,750 gal/acre.

⁵ Not applicable if cropland or pastures meet long-term no-till or have perennial or established crop. Each surface application of liquid manure must not exceed 10,000 gal/acre.

	 e) 100 ft. of closed depression unless manure is injected or incorporated within 24 hours or prior to precipitation capable of producing runoff, whichever comes first. f) No surface application of manure on slopes greater than 6% that have concentrated flow channels draining to closed depression unless the manure is injected or incorporated within 24 hours or prior to precipitation capable of producing runoff, whichever comes first.
Other	a) Mechanical manure application may not cause the fecal contamination of water in a well.
Requirements	b) Manure may not be mechanically applied on areas of cropland or pastures that have 24 inches or less of separation between the ground surface and apparent water table.
	 c) Manure must be applied in conformance with a nutrient management plan that meets the requirements under all of the following:
	The plan must be consistent with s. NR 151.07.
	 The plan must be consistent with NRCS Technical Standard 590, dated December 2015. The plan must be designed and implemented consistent with this section to manage manure so as to reduce the risk of pathogen delivery to groundwater and prevent exceedances of groundwater water quality standards.
	d) Manure may not be mechanically applied on croplands or pastures until infield bedrock verification or Silurian bedrock map information is used to identify areas where the Silurian bedrock soil depth is less than 5 feet. If infield bedrock verification uses drill cores or other subsurface investigations, they must be backfilled with the soil within 72 hours of being created.
	e) Manure may not be mechanically applied on croplands or pastures where the Silurian bedrock soil depth is less than 5 feet until such fields are evaluated and ranked for risk of pathogen delivery to groundwater. Areas determined to have a high risk for pathogen delivery to groundwater must be avoided or must be lowest priority for manure application.
	f) Mechanical application of manure and headland stacking of manure is prohibited on soils with 5 feet or less to Silurian bedrock when soils are frozen or snow covered.
	g) Mechanical application of manure is prohibited within Silurian bedrock having soil depths less than 5 feet when rainfall greater than one inch is forecast within 24 hours of planned application.